



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,380	03/22/2001	Mark J. Hampden-Smith	41890-01470	3937
7590 04/21/2004			EXAMINER	
MARHS FISCHMANN & BREYFOGLE LLP			HAILEY, PATRICIA L	
Suite 411			ART UNIT	
3151 S. Vaughn Way			PAPER NUMBER	
Aurora, CO 80014			1755	

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/815,380	HAMPDEN-SMITH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Patricia L. Hailey	1755	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23,29-35,37,38,82 and 83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23,29-35,37,38,82 and 83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Applicants' Amendment after Final Rejection, filed on March 11, 2004, has been made of record and entered. In this amendment, claims 41-46 have been canceled. No new claims have been added.

Claims 1-23, 29-35, 37, 38, 82, and 83 remain pending in this application.

### ***Withdrawn Rejections***

The provisional rejection of claims 41-46 under 35 U.S.C. 101 as claiming the same invention as that of claims 41-46 of copending Application Serial No. 09/532,917 (now U. S. Patent No. 6,660,680) has been withdrawn in view of Applicants' cancellation of these claims. Additionally, the 112(2) rejection of claims 41-46 for being indefinite, as stated in the previous Office Action, has also been withdrawn in view of the cancellation of claims 41-46.

### ***New Ground(s) of Rejection***

Applicant's arguments with respect to claims 47-68 have been considered but are moot in view of the new ground(s) of rejection.

The New Ground(s) of Rejection involve the Examiner's review of Applicants' Oath/Declaration, and in view of the availability of U. S. Patent No. 6,660,680 to the Examiner.

***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Applicants have not provided any information regarding an attorney or agent of record.

***Terminal Disclaimer***

2. The terminal disclaimers filed on March 11 and April 2, 2004, disclaiming the terminal portion of any patent granted on this application have been reviewed and are NOT accepted.

3. The person who signed the terminal disclaimer is not recognized as an officer of the assignee, and he/she has not been established as being authorized to act on behalf of the assignee. See MPEP § 324.

4. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

For these reasons, and because the Oath/Declaration has been indicated as defective, as stated above, the following double patenting rejections are maintained:

***Double Patenting***

**5. Claims 1-23, 82, and 83 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 47-68 of copending Application No. 10/210,597.**

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in both the instant application and the '597 application are directed to a powder batch comprising composite electrocatalyst particles comprising a support phase and an active species phase. However, the claims in the '597 application state that the electrocatalyst particles have a specified particle size distribution, whereas the claims in the instant application do not. As such, the respective sets of claims are considered to read upon each other (and are therefore not patentably distinct) because the respective sets of claims recite other common properties in comparable values (either the same range or an overlapping range), such as the average size of the support phase, the average cluster size of the active species phase, the surface areas of the electrocatalyst particles, as well as what the support phase and the active species phase each comprises.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness. In re Malagari, 182 U.S.P.Q. 549.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**6. Claims 1-3, 6-16, 29-35, 37, 38, and 82 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 and 30-34 of U.S. Patent No. 6,660,680.**

7. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the '680 patent specify that the claimed powder batch comprises a "metal oxide active species phase" in claim 1, whereas claim 1 of the instant application only recites an "active species phase"; however, claim 6 of the instant application recites that said phase is a "metal oxide". Additionally, claim 19 of the '680 patent specifically recites a step of heating an aerosol of droplets by passing the droplets through a heating zone, whereas claim 29 of the instant application merely recites the heating of the droplets.

With respect to claim 82, the subject matter therein—the recitation that the claimed electrocatalyst particles have an average particle size of not greater than about 20  $\mu\text{m}$ —encompasses the subject matter of claim 9 in the '680 patent ("an average particle size of not greater than about 10  $\mu\text{m}$ ").

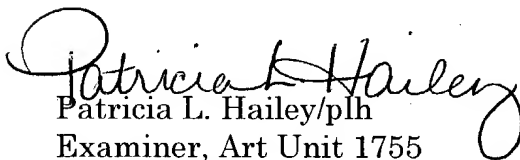
### ***Conclusion***

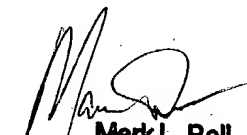
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Patricia L. Hailey/plh  
Examiner, Art Unit 1755  
April 19, 2004

  
Mark L. Bell  
Supervisory Patent Examiner  
Technology Center 1700